

REMARKS

Claims 1-19 are pending. All claims were rejected under 35 U.S.C. §§ 101 and 112, first paragraph. These rejections are overcome. Claims 1-19 are canceled by the present amendment. New Claims 20-40 are added to the application to claim the invention more distinctly. No new matter is being introduced. Acceptance is respectfully requested. For the reasons discussed below, all claims are in condition for allowance.

Rejections under 35 U.S.C. §§ 101 and 112, first paragraph

Claims 1-19 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Office Action states that the claimed “example source code” is an abstract construct that does not relate to the transformation of real world data by some disclosed process. Claims 1-19 were also rejected under § 112, first paragraph, in accordance with M.P.E.P § 2107.01 (IV). To address the rejections, Claims 1-19 have been canceled.

Preferred embodiments of the invention relate to a technique for implementing an interactive online learning environment that assists a user in learning a computer language. An example markup indicator, such as a markup tag, is defined. For instance, the example markup could be the string <example> and content (code, text, etc.) that follows the <example> tag would be included in an interactive coding example. For illustration purposes only, consider the following simplified implementation using HTML as the source code language, which is similarly described at pages 12-13 in the application:

```
<example>
  This is a simple coding illustration
  <UL>
    <LI> This code creates a bullet point for a new line item within a list
    <LI> This code creates another bullet point for a new line item within the list
  </UL>
</example>
```

In the above illustration the , , </UI> tags are HTML source code, which creates a list with bullet points, respectively. All of the text and HTML source code that are in

between the `<example>` `</example>` tags are presented to the user in an interactive coding tutorial with the code presented as shown, while the example tags are hidden. All of this code and text could be in an electronic document. Preferably, an execution engine processes the electronic document, and when it detects the presence of example markup tags `<example>` `</example>`, it knows that all content (code, text, etc.) between the example tags will be presented to the user in an interactive coding tutorial on a browser interface.

In addition, the user can modify the source code that is between the example markup tags `<example>` `</example>`. The user can also request that this source code be processed. Preferably, there would be an execute button on the interactive coding tutorial interface, which the user could select. This execute button would cause the execution engine to process the source code (which is between the example tags) by debugging, compiling, interpreting or translating the source code to produce the result of the translated source code. Using the above HTML illustration, if the user selects the execute button to have the system process the source code, the system would present the results to the user in a browser interface as follows:

This is a simple coding illustration

- This code creates a bullet point for a new line item within a list
- This code creates another bullet point for a new line item within the list

Furthermore, any errors in the source code would preferably be illustrated or explained to the user.

The above illustration is provided for the convenience of the Examiner. It presents merely one possible implementation using HTML, and in no way limits the invention, which may be implemented as claimed with any computer language, such as C++, Curl, etc.

The claimed invention, as set forth in new Claim 20, requires *defining an example markup indicator that is used to create an interactive coding tutorial having modifiable source code*, which is something new that generates a “concrete, tangible and useful result” within the

meaning of the *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d at 1373, 47 USPQ2d at 1601-02 (Fed. Cir. 1998). As discussed above, preferably, the example markup indicator identifies modifiable source code in an electronic document that is part of an interactive coding tutorial. This enables a content developer to easily design an interactive coding tutorial for a computer language. When an execution engine, for instance, detects an example markup indicator in an electronic document, it knows to create an interactive coding tutorial that has modifiable source code.

The claimed invention, as set forth in new Claim 20, further requires *responding to a request to process the modifiable source code by providing a result based on the modifiable source code*, which is something new that generates a “concrete, tangible and useful result” within the meaning of the *State Street*. See *id.* The source code is modifiable and is processed (e.g., compiled or translated) to produce a result in response to a request. This enables a user to see the results of the source code at runtime.

Thus, the claimed invention, as set forth in Claim 20, produces a concrete, tangible and useful result and meets the requirements of patentable subject matter under *State Street*. See *id.* Independent Claims 30 and 40 require limitations similar to those set forth in Claim 20. Therefore, Claims 30 and 40 produce a concrete, tangible and useful result. As such, Claims 20, 30, 40 and their respective dependents are in condition for allowance. Accordingly, it is respectfully requested that the §§ 101 and 112, first paragraph rejections be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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